EDU 211

(PSYCHOLOGICAL FOUNDATION OF EDUCATION)

NOTES

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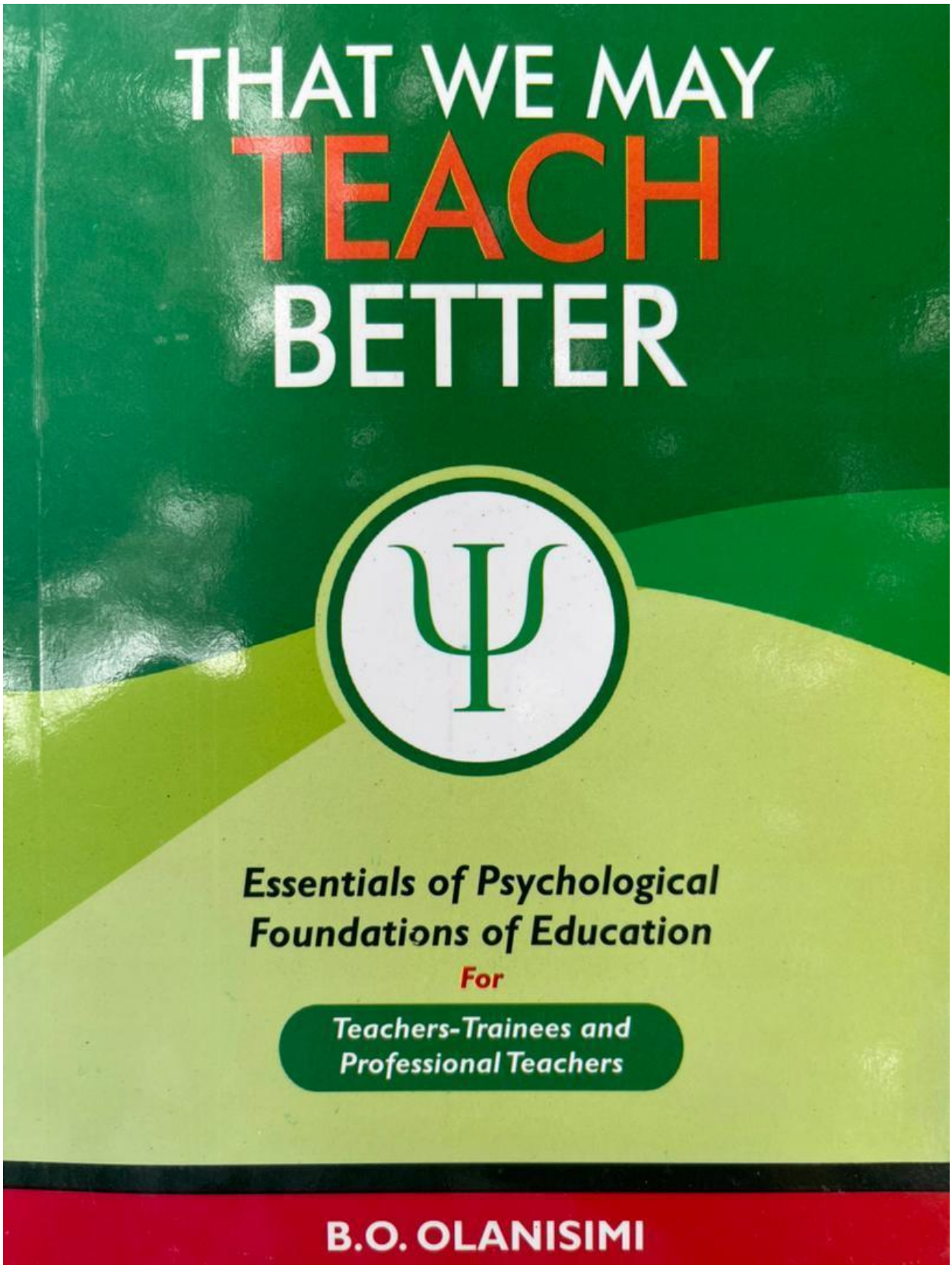

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CHAPTER ONE
THE TEACHER, THE LEARNER AND THE SUBJECT MATTER

INTRODUCTION

If we are asked to answer the question "Who is a teacher?" we are likely to hesitate and do some reflection before proposing what we would consider an adequate answer. Some people would even start by saying It all depends on how one looks at it. The reason for this is simple. In a sense, everyone can be considered to be a teacher at one time or another. The farmer who teaches his son to make mounds and plant cassava or yam can be considered to be a teacher for that purpose. The woman who teaches her daughter to cook meal can also be considered to be a teacher. This view point would particularly apply to traditional societies where there were no formal schools and the society in general brought up the young generation in an informal way. This idea of everyone being a teachers can even be extended to cover the lioness that teachers its cubs to hunt their prey! This is also perhaps one of the reasons why in most societies, teachers have tended to be looked down upon. Many people believe that there is nothing special about teaching and that, therefore anybody can teach.

Modern societies have created the school as a special institution for bringing up the child. With the development of transportation, and especially with industrialization, scientific discoveries and advanced technology, the modern society has grown to becomes so complex that not only is there so much to learn by the younger generation, but also it has become more and more difficult for each member of the society to occupy himself or herself with the problem of bringing up the child all alone in addition to being engaged in other areas of activity for earning a living. With the advent of the formal school system, the concept of the professional teacher emerged a person who imparts knowledge for a living. At the beginning there was no special training or preparation for the teacher other than that the

would-be teacher was 'knowledgeable'. But soon, like other profession, it became necessary to receive some training not only in the subject areas being imparted but also in areas like child psychology, principles and practice of education, methods of teaching etc.. In addition to formal practice in the 'art of teaching'.

Today, although we still have people who engage in teaching without any formal training in teaching or special courses in teacher education, those who have this background education are becoming numerous enough even in Nigeria to make us include the component of training or teacher education in our definition of the teacher. A teacher then would be seen as who has been specially prepared to exercise the profession of teaching or imparting knowledge, skills and other personal qualities to learners in a formal school system. This definition may help us for our purpose to exclude people like preacher, instructors, public speakers etc from the category under discussion. Teachers are thus engaged in developing the learner's head, hand and heart (the three H's). We shall take up this idea of teaching later. Meanwhile, it suffices to emphasize that the teacher is engaged in the education of the child. We should note here that the word school has been used in its general sense to mean any institution at any level set apart for the education of the child. The child too is used here to represent the learner of any age. Other terms can be used instead would include the student, the pupil and the learner.

Learners in the school system are the "raison d'etre" of any curriculum. Without learners, there can be neither school nor curriculum. The effectiveness of the teacher's work is demonstrated through how much learning has taken place. The school environment is judged by how much and how it affects the learners; and the extent to which our objects for any curriculum have been realized is largely determined by the kind of learning that has occurred. Thus, both the teacher's and the curriculum planners' interest In learners is primordial. Our interest in learners usually takes two forms viz, finding out

what these learners are like, or in other words, learner characteristics; and finding out how effective learning can take place (the learning process). We usually turn to Psychology for an insight into both the nature of the learner and the nature of learning processes. In this area of study, we find that in growing up, the learners undergo certain changes in size and structure of the body. this growth and development is usually accompanied by certain behavioural characteristics which affect learning, social interaction, attitudes etc. We also find out that learners exhibit individual differences in many respects and finally we find how learning takes place and what factors affect it. All these are the major concern of this chapter.

THE GROWTH AND DEVELOPMENT OF LEARNERS

In terms of the physical aspect of the individual, growth may be referred to as changes in the size of the body or parts thereof while development may be seen as changes taking place in respect of physical features. In other respects (e.g. mental or emotional aspects) growth and development may be used interchangeably. The findings may be gleaned from studies of developmental psychology:

(a) Growth and development in physical terms take place in stages from childhood right through adolescence to adulthood.

(b) The physical changes involved affect the individual in certain ways in terms of the kinds of activities he is capable of doing, his emotional state, the way he interacts with others etc. A knowledge of such changes will help the curriculum planner to stipulate the kinds of activities suitable for each stage of development and seek ways of helping learners to cope with characteristic problems of the various stages.

(c) Emotional development will involve changes in the way in which the learner considers social interactions, problems of right and wrong , good and bad etc. and moral issues

generally. Three main stages of emotional development have been identified:

(i) The pre-conventional, during which the child responds to human actions as being good or bad, expecting the good to be rewarded and the bad to be punished.

(ii) The conventional stage, when the child seeks to adhere to rules, tries to behave well and gain approval of others.

(iii) The post-conventional, which has a law-and order orientation, the right action fulfilling a social contract.

NATURE OF THE SUBJECT MATTER

Subject matter is usually organized in disciplines, a discipline being defined as both a way of making knowledge and as the domain occupied by particularized knowledge. For Instance, knowledge pertaining to physics has been discovered by a given set of methods peculiar to the physicist as a laboratory scientist and the content of this knowledge is quite distinct from knowledge in chemistry, biology, history, geography etc. each discipline has its own integrity because it has been built up over the years by respectable and intelligent, creative specialists.

Subject matter as content of education would therefore consist of what men know and believe in various disciplines. Each education system will select this content according to what it regards as relevant and significant to organized fields of knowledge or what it thinks will be interesting to the learners and relevant to their needs. There are two aspects of the subject matter to be considered: the subject matter as substance and the subject matter process, in other words what and the how. Learning both the substance and the process categories forms the curriculum of the school These are seen clearly by considering the level of knowledge.

LEVELS OF KNOWLEDGE

The lowest level of knowledge is that of specific facts and processes: parts of a flower, features of a capitalist economy,

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countries of Africa and their capitals, formular for working simple interest, theorems in geometry, conjugation of verbs in language etc. All these are data which can be used as instruments of though; they are building blocks for developing basic ideas. Knowledge acquired. As such, it is quickly forgotten. Unfortunately, most of our school learning ends at this level.

The second level of knowledge is that or basic ideas and principles understanding the structure of the sentence in languages, building up a formula in mathematics, understanding how a wind vane works, knowing the principle of supply and demands in economics etc. at the level, facts are seen in relation to one another and a pattern of relationships is built up. There is a deeper level of understanding involved in dealing with basic ideas and principles and such an insight can be used in solving important problems and as stepping stones towards the attainment of higher levels of thought processes.

The third level is that of concept: human interdependence, 'set' in mathematics, structure in biology, style in literature etc. these are threads of though or universals running through the curriculum. They are bigger rallying points for various facts, ideas and principles and they help In building up the though system of individuals. Several subjects contribute simultaneously to the building up of concepts. Concepts buildings is better done by the pupils themselves rather than given by the teacher.

The highest level is that of though systems which direct the flow of though and inquiry in learning. Each though system includes interrelated concepts, principles and definitions. On this basis, mature pupils (at the higher level of education) ask intelligent questions, relate ideas and engage in relational thinking. They also become creative.

It should be noted that at most of these levels, pupils' active participation is important. They have to discover many of the principles, ideas and concepts themselves, with the aid and guidance of the teacher. Even the facts can be discovered by the

pupils through observations, reading, discussion and experimentation, nd process neither of which should be neglected in any curriculum.

THE NEED FOR SELECTING SUBJECT MATTER

World civilization today is characterized by a phenomenal explosion of knowledge in all fields of learning, more and more knowledge is being discovered everyday and the frontiers of knowledge are very expanding. What was regarded as an aspect of a discipline ten years ago has developed into a full- fledged discipline today. Moreover, what was widely acclaimed as a fact a few years back has now been discovered to be a fallacy. In addition, the need of society are changing, the agrarian society is becoming industrialized, the industrial world is in the process of computerizing all aspect of life and seeking ways of conquering heavenly bodies; wholesale importation by third world countries given way to transfer of technology. Having i earlier that the school is a creation of society for the purpose of initiating the youth into its culture, we find the problem of choosing what to teach can not be considered beside the orbits of the society being served by the school. Let us now clarify the issues involved.

CHAPTER TWO
PSYCHOLOGY AS A DISCIPLINE

Psychology is an organized discipline whose findings are far-reaching. The word psychology is derived from two Greek works, psyche and logos. Psyche means soul and logos mean science. Thus psychology was first defined as science is soul. However, modern psychologist do not accept this definition as soul is some thing metaphysical, it can not be seen observed and touched we cannot make experiments on soul.

Modern psychologists then define psychology as a scientific study or the behaviour of man and other animals which include the individual's behaviour and thinking, from time before birth through maturity to declining years. This study can be broadly interpreted to include a vast array of factors such as the relationship of physical development of behaviour, motives, attitudes and abilities. Psychology is like other science in seeking to comprehend, to predict, and control, taking as its special subject matter the behaviour of man and lower animals.

What is educational psychology? Educational psychology generally focus on the human factor in learning in short educational psychology courageously attempts to apply psychological findings from basic researches on human learning, human growth and development, human personality and adjustment to improvement in teaching, curriculum and motivate pupils to learn. Ausubel (1986) gave a useful definition of educational psychology when he defined the field as "that special branch of psychology concerned with the nature, conditions, outcomes and evaluation of school learning and retention".

Blair, Jones, and Simpson further defined educational psychology as "learning is how to make judgments and to take decisive action ... Require the teacher to understand himself, his pupils, and the process of learning and intellectual development".

Klansmeter and Goodwin (1966) emphasize human learning, instructional conditions and improvement of educational practice as central to the field. Because many of the above, outlined definitions tended to portray educational psychology as totally dependent on the findings from psychological experiments on rats in the laboratories, there is the need to give a new definition which should consider educational psychology as a science in its own right. In short psychology is not necessarily the pure science of educational psychology; rather educational psychology is better conceptualized as the scientific study of human behaviour In educational settings. This suggested definition Implies that educational psychology as a scientific endeavour has a contents are to be used in professional practices such as remediation of educational deficiencies guidance and counselling, behaviour therapy continuous assessment and school psychological practices.

WHAT IS PSYCHOLOGICAL FOUNDATIONS?

Psychological foundations consist of the accumulated knowledge and understanding which guide the learning process and the teacher who is executing the curriculum to make intelligent decisions regarding the behaviour of the learner.

OBJECTIVES OF EDUCATIONAL PSYCHOLOGY

An overview of the possible benefits of educational psychology can be obtained by considering its objectives:

1. To understand how learning process in child can be effectively guided.
2. To determine how teaching can be made effective.
3. To determine how educational goals can be made more meaningful.
4. To determine how desirable educational goals can be achieved.
5. To evaluate the influence of curriculum changes which may be needed in order to make school learning more relevant to cultural setting.

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6. To help the child to achieve personal prestige and achieve higher levels of performance.

METHODS USED BY EDUCATIONAL PSYCHOLOGISTS FOR INVESTIGATIONS

Psychologists use scientific methods to enquire, to seek, observe, control, record and explain relationships among happenings (variable) around.

Essentially the methods of investigation are as:

a. **Observational method**: This is a systematic method of observation and recording events as they occur in the real world. Careful observation of animal and human behaviour is the starting point for psychology. Such observations of natural phenomena gradually merge into experiments as the conditions of observation are standardized through laboratory control.

b. **Survey method**: Some studies that are difficult to conduct by direct observation may be done through the use of questionnaires or interviews and survey which consists of questions to which individuals are asked to respond. The purpose of the Interview is to determine the general opinions, attitudes and feedings on a specific issue.

c. **Test method**: Psychological tests are used to measure all kinds of abilities, interest, attitudes and achievement. Test enable psychologists to obtain large quantities of data from people with a minimum distance of their daily routines and without elaborate laboratory experiment it is a more objective way of investigation.

d. **Case study**: Here, one individual is examined intensively to find out as much as possible about a certain problem or issue as it relates to the individual procedures used, usually it include a combination of scientific biographical data on individual administering psychological tests and interviewing him extensively.

e. **Experimental method**: The experimental psychologist's attempts in manipulate and control his subjects. The

phenomenon to be investigated is brought into special laboratory, where could thus of interests can be manipulated with precise equipment and procedure, and where all extraneous and distracting variables can be ruled out.

IMPORTANCE OF PSYCHOLOGY TO EDUCATION IN CLASSROOM PRACTICES

1. It helps the teacher to know the learner individually and collectively.
2. It helps him to explain what happen in the classroom or is expected to happen in terms of the learners personalities development stages and developmental problems of students the class.
3. It helps the teacher to know the learning process i.e. the process by which people change their behaviour, improve performance, recognize their thinking or become familiar with new concepts and information.
4. It helps the teacher to understand the learning situation, any factor or condition that affects the learner or the learning process. Teachers who are aware of the intimate relationship between the learning process and the learning situations are position to use their awareness to develop situations that promote effective learning.
5. It helps the teacher to know the needs of the learners in the curriculum planning.

CHAPTER THREE
BIOLOGICAL ASPECTS OF HUMAN DEVELOPMENT

Much aspects of human behaviour and mental functioning can not be fully understood without some knowledge of the underlying biological processes. The life of every individual when the nucleus of the sperm (male) reproductive cell of or gamete fuses with the nucleus Is the ovum (egg) in the fallopian tube (oviduct) but the date of this cannot be exactly determined in mankind. The fertilized egg begins a process of growth and development. The reproductive cells contain the hereditary materials to the chromosomes and de-oxyribonudeic Acid (DNA) molecules. The DNA molecules of the nucleus direct all chemical reaction (metabolism) that go on in the cell.

THE NERVOUS SYSTEMS

The nervous system has two broad divisions: central nervous system and the peripheral nervous systems.

The basic unit of neurons system is the individual cell called neurons. Neuron cluster together in a nerve. The main functions of neurons is to relay messages. The major neurons are sensory neurons which relay messages. The major nervous are sensory neurons which relay messages over how distance from receptor organs towards the brain the motor neurons carry messages over long distance from the brain to effect, or organs.

THE CENTRAL NERVOUS SYSTEM

The central nervous systems comprises of two parts. All the nerves in the brain and spinal cord contains most of the body's nervous. The major parts of the brain and their functions are:

Cerebrum: is the seat of sense of perception voluntary movement learning, remembering thinking, emotions and consciousness.

Cerebral Cortext: Is the thick layer of never cell bodies covering the cerebrum. It is the centre where all complex mental activity takes place.

Medulla: Controls breathing, swallowing digestion, and heart beat.
Cerebellum: Is the part that is responsible for body balance, coordinating of voluntary movement of fingers thumb.
Hypothalamus: Regulates endocrine activity, governs eating, drinking, sexual behaviour, sleeping and temperature control. It maintains homeostasis which is the general level of functioning of the healthy organism such as normal body temperature.
Spinal Cord: Is the path for conducting motor and sensory impulses and reflexes.

THE PERIPHERAL NERVOUS SYSTEM

The peripheral nervous system comprises the somatic and autonomic nervous system and overt reaction and external stimuli. The nerves of the somatic system carry massages and body surface to the central nervous system.

The autonomic system (comprising sympathetic parasympathetic systems) is primarily concerned with controlling the body's involuntary activities such as breathing, heartbeat digestion, secretion of sweat so as to maintain optional balance in temperature and other aspects of the body's internal environment.

PRE NATAL DEVELOPMENT

The process of development from conception is called pre-natal period and it is divided into three phases:

Period of the ovum lasts from fertilization until the time the foetus is firmly implanted in the wall of the uterus (10-14 days).

Period of the embryo characterized by a differentiation to a the major organs that will be present the newborn baby (2 to 8 weeks). Period of foetus characterized by growth of the organism until delivery (8-40 days)

THE PROCESS OF BIRTH

The muscles of the walls of the uterus contract rhythmically. This makes he cervix dilate. The placental connection is then

broken ad makes the cervix dilate. The placental connection is then broken and the embrogonic membrane burst. Next, the amniotic fluid is discharged and the foetus gradually emerges from the dilated (expanded) virginal. The umbilical cord is then detached from the mother by an attendant and only a small portion may remain attached to the naval or umbilical cord. The remaining of the umbilical cord, the placental and the embrogonic membrane are known as afterbirth. This, if remain in the body of the mother, it may decay and poison the mother's blood. This may consequently lead to the death of the mother.

EFFECT OF EXTERNAL FACTORS ON PRE NATAL DEVELOPMENT

It is essential that prospective parents be made of certain factors that are capable of influencing the pre natal development of unborn child, there factors that can be harmful to the unborn child. Psychologists are interested in the dangers that external factor can cause an unborn child, as it can adversely affect the child's psychological development and the social structure substance capable of producing foetal abnormalities which are classified as teratogens. These factors include:

a. **Age of he mother**: Investigation has shown that child mortality rates are higher if the mothers age is below 20 or over 35 years before delivery their first child than if the mother is between 20 to 35 years of age. Mothers who are under 20 and over 35, also tend to have higher proportion of retarded children than mothers between 20 and 35. years of age. Women approaching the menopause in their thirties or easily forties frequently have endocrine disorder which slow down the development of empire of and causes developmental irregularities as such cretinism, mongolism and heart malformation which may result in mental and physical defects.
b. **Maternal Diet**: The foetus depends on its mother's food supply through the placenta and umbilical cord. It follows

that if the mothers food is inadequate, the health of the unborn child will be adversely affected malnourished pregnant mother tend to have children that weigh less at birth. Pre-mature births, stillbirths, amnestia threatened and actual miscarriages are much more frequent in poor diet pregnant mothers.

c. **Irradiation**: Large doses of irradiation, such as those used in x-ray, photography are known to damage the foetus or induce abortion. The more dramatic illustration of the effect of atomic bomb radiation on the foetus manifests on Hiroshima Japan children in 1945

d. **Maternal Diseases**: Foetal infection can occur from maternal disease since the foetus receives its nourishment from the mother through the placental and the umbilical cord. Investigation has show that child born with smallpox transmitted from the mother during pregnancy.

e. **Maternal Stress**: This is a general emotionality over prolonged period of time, stress can be the result of feelings of fear, rage anger, grief, jealous or envy. A woman may resent her pregnancy because of a number of reasons: marital or economic difficulty interference with educational or vocational plans, physical discomforts baby born with unhappy home themselves are often unhappy.

f. **Drug Use**: many drugs taken by the pregnant mothers are able to diffuse through the placenta and have a direct effect on the unborn child. For example birth to infants similarly addicted the tranquilizing drug, thalidomide has been known to cause deformity of infants born to mothers who took the drugs.

EFFECTS OF HEREDITY AND ENVIRONMENT ON DEVELOPMENT

Growth and development are the result of influences of heredity environment, maturations, and learning.

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Heredity refers to the transmission of potentialities or traits of physical, mental and other characteristics from the parents to off-springs.

What are genes? Genes are units of material inheritance for expression of characteristics which are passed from parents and to off-springs through the gametes which affect every aspect of organism.

What are chromosomes? Chromosome are structures found in nuclene/cell arranged in pairs during cells division and carriers of heredity factors.

Recessive: The character which does not produce its affects- the presence of the dominant character.

Dominant gene: The character that produces it effects even though the opposite or contrasting character is present.

Environment implies any and every influence with which an individual comes into contact after the hereditary pattern has been received through the germ plasma.

CHAPTER FOUR
CHILD DEVELOPMENT

The childhood stage begins about the age of two up to six years, even the child becomes sexually mature at about eleven years for girls and twelve for boys this stage is divided to two separate periods early and inter childhood. Early childhood is between two to six years whenever later childhood extends from six to eleven years plus.

Physical growth during the early childhood proceeds at a slow rate as compared with that is the infancy period. The average child measures 120cm at age of six. At six, a boy weights on the average about 22.2kg and as the boy become more matured, J growth is intermediate.

At the later childhood growth is relatively slow but somewhat uniform. Puberty start in the child dent with his bones during this period. Body bones increase in size. The child is almost completing the growth of the teeth. The motor development of the
child at this period of the childhood, growth proceeds to fine motor activities. Before a child can run, it means that the child has some disjointed activities, before that fine motor activity of running came to be. According to the law of growth the child's motor skills develop from the crude and diffused man action to fine responses. For example when a child is learning how to write, the child will be at first very chunking in handling the pencil, or the child may make line in papers while uniting or while erasing some letters. But with maturity, practice and experience the child acquires the fine skills as the child at this stage of development. But as the stage proceeds, the child continues to gain marking. The child can gain fine coordination.

Motor development can be enhanced in the following ways:

i. Provision of brightly coloured objects for child to play with.
ii. Provision of relatively free and flexible situations, spacious and conducive for the child

iii. In learning how to write, crayons, soft chalk should be used at the stage of writing.
iv. Corsive writing should not be informed at the period of development.

EMOTIONAL GROWTH AND DEVELOPMENT

Emotional are outward expressions of inner feelings which are aroused by one's behaviour or that of others emotion. This can be classified into two categories: unpleasant emotions e.g. fear, anger anxiety sorrow, jealousy, guilt. These sometimes impede or Inhibit growth. Pleasant emotions includes: joy, love or affection, happiness, pleasure, humour and laughter. 1hese facilitates growth and development and brings about mental health in the individual throughout his life.

Fear, anxiety and worry are brought about by feeling of insecurity. Fear is caused in children by loud and sudden noise, strange and unexpected objects frightening situations or passions, darkness and loss of physically support.

At times the child is afraid because he is left alone. During the pre-school years, and early school years children are found to fear a number of things like kidnappers, ghosts, heavy rain, wind etc. anger may produce undesirable behaviour in people. We experience feeling of when we restrict their movement. Jealous is taken by some psychologists as a form of anger. It finds its roots in early childhood. The child becomes jealous when he thinks parental interests and attention are shifting towards someone else.

TWO THEORIES OF EMOTIONS

James Lange theory, after the two men (William James and Carl Lange) who originated it, states the feedback (repercussion) to the brain from bodily responses produces the conscious experiences of emotions. According to this theory, muscular activities proceed the feelings of emotion. Instance where experience of emotion does follow bodily is something like this. When you are faced with a threat of armed robbers (a

threatening situation) on a highway you a automatically look for a way of escape before you recognized be a state of fear. The theory seems to put the cart before horse. That is the emotional experience comes after bodily reaction to stimulus.

Cannon's theory; is objecting to James-Lange theory states that emotional experience occurs as soon as the cerebral cortex receives the messages from the type thalamus (which regulates endocrine activities and maintains homeostasis) it depends upon feedback from the internal organ and skeletal responses.

HOW TO DEAL WITH FEAR, ANXIETY AND WORRIES

1. As parents and teachers, we should show confidence in the presence of things that can arouse fear, e.g. animals, darkness, thunder lightening, strange people etc.
2. We should teach appropriate skills that can help the child to overcome fears and worries for instance, a child that is afraid of aggressive mates can be taught boxing, wrestling and how to defend himself.
3. We teach the child certain facts and information which get rid of the unknown or strange elements in his environment.
4. We should avoid using fear and threats to secure obedience or to induce the child to do certain things.

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CHAPTER FIVE
ADOLESCENT DEVELOPMENT

The period of life known as adolescence is a unique one. Unique in the sense that it is a period of rapid changes. The changes are not only physical but also they are emotional and social in nature. One fundamental problem that is encountered in the study of adolescence is the one of determining when it actually begins, when it ends and the boundaries within it. Steinberg (1996) says the boundaries of adolescence are biological which begins with puberty and ends with the ability to sexually reproduce, emotional which begins with detachment from parents and ends with the attainment of a separate sense of identity, the cognitive boundary begins with the emergence of advanced reasoning abilities and ends with the consolidation of interpersonally abilities.

Socially, adolescence begins with the training of social roles such as family and citizenship roles and the training to take up adult work roles. In the cultural context, adolescence is said to begin with the period of training for a ceremonial rites of passage and ends when such rites are completed. The Stanley Hell's (1846-1924) hypothesis of all crises that can be associated with this transitions. These foundational transitions are evident in the biological, cognitive and psychosocial changes that occur in adolescence. Biological transition in adolescence.

The biological transition occurring in adolescence is generally referred to as puberty. Puberty encompasses all the physical changes that occur in adolescents to adulthood. Puberty heads to full physical and sexual maturity. It consists of the following land makes (Marshals 1978).

1. Rapid acceleration in growth resulting in weight and height
2. Development of primary sex characteristics, in the are us of genitals, sexual reproduction male testes and female ovaries.

3. Changes in body composition in terms of distribution of fat and muscle in the body.
4. Changes in the circularly and respiratory systems which give the adolescent in waxed straight and ability to tolerate more rigorous exercises.

HORMONAL CHANGES IN ADOLESCENCE

At puberty, the adolescence begins the production of sex hormone. Hormones are chemicals produced by the endocrine glands are secreted directly into the blood stream, carrying the hormones to various organs of the body. The pituitary gland, located at the base of the brain, stimulates the sex glands to begin the secretion of more hormones.

The hormonal increases in adolescence are found also to influence adolescence emotions. Hormones affect the organization and the activating influence emotions. The timing of puberty also has its emotional off if the physical maturation is early or late. Livson an Peskin (1981) have carried out longitudinal studies with the conclusive. That early maturity boys seem to have more social advantages while late maturity boys are not are popular as early maturity boys one the other had early maturation as her early sexual maturity may find her attracting male attention, a situation she is not ready for psychologically. In contrast, late maturity girls have social advantages as they are rates as more attractive and considered better leaders.

In the social sense, the adolescence goes brought a process of socialization in which he/she leans to adapt to ways, ideas, beliefs and values of the social systems he belongs to. Socially, developmental tasks in line with the thoughts of Haring Hurst (1972) expected of the adolescences are:

1. Accepting her/her physique, that is she has to agree that she/her is growing up more often than not.
2. She/her has to achieve a new and more matured relations with age mates of both sexes.

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3. The adolescent has to perform either masculine or feminine roles.
4. He/she will have to prepare his/her more for marriage
5. She/he will have to think of being independent.
6. He/she has to desire and achieve.

SOCIALLY RESPONSIBLE BEHAVIOUR

These are expectation, which the adolescents is to fulfill before he/she can be called an adult in the society. The process however, holds some fears, anxiety, boredom, desire for full experience of self and so on in the adolescents.

IMPLICATIONS OF ADOLESCENT DEVELOPMENTAL FOR EDUCATION

In the light of numerous roles the adolescents is expected to play before developing into a mature adult, the following are suggested for guiding them:

a. The home is of greatest importance to the adolescent. A good home provides love support, encouragement and security to cope with life's demands.
b. Parents and teachers should render great assistance to the adolescent by permitting him to work as an independent individual.
c. Certain amount of parental indulgence is helpful in that it provides an atmosphere of security, notify the individual of the impending contact with the outside world
d. Parents should spend time with their children discussing with them, giving opinions on a number of issues, and allow them to air their own view-points.
e. Teachers should guide them in the phase of hero-worship which leads to new ideals and interests.

ADOLESCENT SOCIAL GROUPS

One of the most difficult developmental tasks of the adolescent is social adjustment to member of the opposite sex, adult community and school environment.

Adolescent adjustment is greatly influenced by a number of factors namely peer groups, close friends, cliques, gangs and crowds.

Equals nonetheless children often have playmates who are three or four years older or younger. Peer exacts influence on various aspects of life, such us dress, diet, friends, sexual behaviour standards, entertainment and attitudes towards authority.

CLOSE FRIENDS OR CHUM

They are adolescents who have known each other childhood and have found that they have mutual interest. The group may be formed merely because chit- in go to the same school or living in the same neighborhood.

Cliques: This may be a single sexed or mixed grouping young people who usually bound together by same emotion. Such a group is commonly found within a school, youth club, church or mosque members. Members can freely express their antagonism, fears, worries and annoyances.

These are several disadvantages being a clique member. The clique encourages snobbishness and discrimination from nonconformity, the clique stifles members individuality.

Gang: Gang is a more organized group of adolescents. Members sometimes come together for some good purpose. However members may turn into a gang because of conflicts and pressure from the adults. Members of a gang dress alike. Socialization is learnt in the gang because members have opportunity to experience themselves.

Crowd: This is another form of adolescent group. This is a spontaneous social unit composed of several cliques or individuals who tend to share similar socio-economic background, values, interest, and who participate in the same social activities. Members acquire competence in social skills and sense of responsibility.

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SEX EDUCATION FOR THE ADOLESCENCE

According to Fakunle (1986) sex education is a process of making the individual develops a positive and wholesome attitude toward sex. It is also a process that will enable the individual to lead a full life, enjoy his or her life fully as of developing to a responsible member or the society to which he belongs. Discussing the purpose of sex education

Olayinka (1957) argues that sex education is designed to:

1. Prepare our youths to cope with the developmental task of becoming responsible men and women in future
2. Give correct and factual information and understanding of problem of sex such as its development, function and expression.
3. To give our youth cogent reasons so that they can avoid sex urges.
4. Enlighten our youth about the prevalents of Sexual Transmitted Diseases (STDs) than disgust, fear and indiscriminate sexual behaviour. Enable our youths to develop self-respect themselves and their spouse.
5. Enable your youths to develop self-respect for themselves and their spouse.

HOW TO AVOID EARLY MARRIAGE AMONG THE ADOLESCENCE

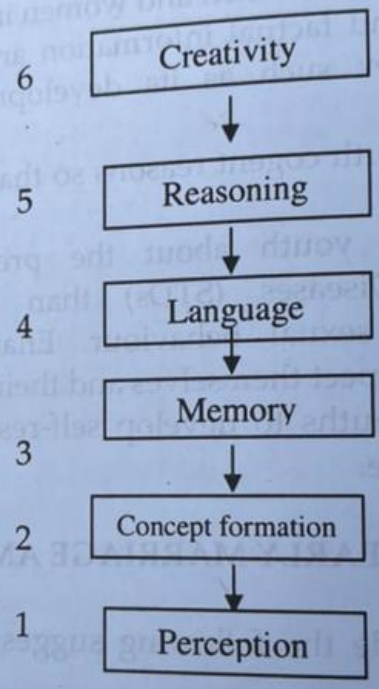
Jack (1970) made the following suggestions to avoid early marriage.

1. Provide happy home for children, for children to grow up in a home in which their parents have respects for each other and their children so that the young ones can grow valuing themselves.
2. Avoid using sex as a means of satisfying certain needs other than those in marriage.
3. Masturbation leads to physical and mental defects and problem, avoid it.
4. Avoid long period of love making to avoid sexual stimulation.

CHAPTER SIX
COGNITIVE DEVELOPMENT

In the intellectual and cognitive development of an individual, certain cognitive skills or competencies helps to identify an intelligent person.

Bakare (1971) identifies a cognitive ability inerrancy with one ability leading skill are cumulative and it means that the lower rank ordered skill leads into a higher rank order skill.



BAKARE (1979) HIERARCHY OF COGNITIVE SKILLS

Bakare's Hierarchy of cognitive skills suggests that creative thinking is the highest ranking cognitive skills and individual could acquire. A brief description of these skills can help to identify component skills that Intelligence. These are:

Perception: Is defined in psychology as the experience of an individual's interaction with objects and events in the world based upon stimulation of the sense organs. A case study in the

field of perception would therefore highlight the determinants sensory impression such as sizes, shapes direction, orientation, distance and environment.

Concept formation: This skill basically is the acquisition is the capacity to identify and use the attitudes that objects or situations have in common as well as their differences. Concept formation includes the ability to identify the negative and the positive aspect of the class concept, more complex skill formation in concept formation and learning are conjunctive and disjunction concepts.

Memory

Simply defined, it is the ability to recall a learned object. Memory is a monohierarchy system with three levels: procedural memory; (memory that permits of stimulus-response connections and general adaptive responses to environmental events); semantic memory (these are internal individuals present perception); and episodic memory (this is the development and retention of events experienced personally by an individual). The stages of memory are encoding, storage and retrieval (that is, acquisition, retention and recall)

Language

This basically refers to the skill and art of communication involving the vocalization of sounds (speech) embodying specific units of meaning (these imply word) and the arrangement of such according to specified rule (that is, grammar,) psycholinguistics, the study of language as an aspect of the behaviour of individuals that language analysis comprises the following levels phonology (sounds); semantics (meanings); and pragmatics (context effects).

Reasoning

In cognitive psychology, this skill is closely associated with the skills of thinking and problem-solving. Reasoning could be

described as the employment of symbolic representations of events and objects and the manipulation of ideas, image and concepts.

Creativity

As a skill, creativity is the ability to discover or produce new inventions, solutions to problems or even new work of art. Yet creativity is different from problem-solving (or directed thinking) in that unlike problem-solving which finds the correct solutions, creativity or creative thinking is open ended; in that solutions are nor predetermined or predefined in this appropriateness to an issues or problems.

CHAPTER SEVEN
HUMAN LEARNING

There are as many definitions of learning as there are authorities on the subject. Okoye (1987) and Agbereti (2000) have defined it as a relatively permanent change in behaviour. The Oxford English Dictionary describes learning as "deep and wide knowledge gained through reading and study". For our purpose this chapter, however, learning is defined as a relatively permanent change in behaviour as a result of study, acquisition of skills and experience, which could' last for days, months or even years before forgetfulness and decay set in. Thus, relatively permanent change in behaviour as a result of alcohol or drug usage as well as maladjustment behaviour will not be regarded as learning. Learning involves experiencing, doing reacting and undergoing a process of acquisition of knowledge and skills.

Process of Learning

Learning comprises three main stages or processes. There are acquisition, retention and recall. II proceed to examine each of these more closely, starting with acquisition.

Acquisition

Acquisition of information starts from perception, that is, the process by which we become aware of changes in the environment. We perceive through our senses (that is, the eyes, the ears, the nose, the tongue and indeed the entire body). The information acquired by the sense is sent to the central nervous system (CNS) (brain) by various nerves. Various parts of the brain are responsible for the acceptance or acquisition specific information.

The central nervous system (CNS) is the greatest computer on earth. It can encode, decode, store up information, which, as the need arises, can be retrieved without pressing any button or looking for a source of electricity supply. However, like the computer "virus" can affect the CNS; thus information may be

disrupted or lost. This is the case in decay of information as a result of atrophy, and also in the elderly and those suffering from brain damage or other diseases. Learning is definitely affected by the improper functioning of the senses and the blockage of information flow through the nerves to the brain. These often mental retardation, slow learning, poor memory and even differences in the knowledge acquired by two Individuals. All the information sent to the CNS need to be interpreted into meaningful forms and organized in such a way as to bring out the attributes, traits or characteristics of that item (Item Coding). This encoding later develops into concepts principles and knowledge. The information stored in the brain is sent back to the environment when retrieved. (This is illustrated in Fig. 1).

Retention

After perception and acquisition of information comes retention which is the process whereby information is retained in the brain. Memory plays a very important role here. Memory is the power of retaining and reproducing mental or sensory impression of things that are previously perceived, coded and stored. The. memory (or retention) could be short-term (STM), intermediate (ITEM) or long-term (LTM).

The short-term memory (STM) can only retain or store up information temporarily and such information can be easily retrieved when required. The STM cannot retain more than 9 items and not fewer than items at a time. Miller (1956) believes that the STM could retain 7 + 2 or 7-2 words at a time. The continuous processing of new information and the decay of the old one can cause the limited items that can be re tamed.

The intermediate memory (ITM) in its own case is the stop gap between the STM and the LTM. It is often believed to be the working memory because of its constant usage in everyday transaction and communication. Before information is sent to the long-term memory for retention, the process of consolidation takes place. This is the process whereby the

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information from the STM is further refined and this is done in two main ways: catabolisation and anabolisation. Catabolisation is concerned with the

Breaking down of the new information from the STM into tiny pieces, e.g. "Hi-po-po-ta-mus". While anabolisation, on the other hand is the building up of already catabolised information, like the "Hippopotamus" in our example. If the processes of catabolisatioin and anabollisation are not properly done, it will lead to poor retention and improper message to the long-term memory.

The long-term memory could be regarded as the sum total of what we know, that is, all coded information stored and retained in the central nervous system (CNS). Such retained information in the long-term memory determines the extent of our knowledge, learning, thinking, and even, reaction to situations. This is because we retrieve coded information to confront situations, make decisions and even deal with problems, if any.

Recall

The last stage in the process of learning is that of recall or retrieval. In order to retrieve information from the LTM the brain first engages in a sorting out exercise; this is a process by which the particular impression to be recalled is sorted out, from the whole gamut of retained impressions or information within the LTM. After the specific information needed to be retrieved has been sorted out, the individual will now recognized it and, eventually, such information will be decoded and recalled. However at times, what has been recognized may not come off easily, resulting in a difficult recall phenomenon technically referred to as the tip-of-the tongue phenomenon (TOT Phenomenon)

It is observable in this regard that not a few people have failed interviews or lost potential wives or husbands through an inability to recall properly owing to the TOT phenomenon For example, let us imagine that a man has been dating a lady

named Tobi. They part for a few weeks only to run into each other later. Instead of calling Tobi, he gets stuck at TO-TO-TO, or calls some other name such as Tolu. The lady may blot him off her mind believing that he does not have enough interest in her to recall her name. An individual could get over the tip-of-the-tongue phenomenon if he or she shows more interest during the process of catabolisation and anabolisation or gets sufficiently relaxed when he/she is supposed to sort out, recognize and recall a particular item or information.

We shall now examine why people remember or forget what they have learnt.

Why people remember or forget what they have learnt

Apart from the 'tip-of-the tongue' Phenomenon just described, and individual may forget completely what he or she has previously learnt, or remember only part of it owing to many other reasons. One of these is the meaningfulness of the material learnt. Materials which are meaningful stand a better chance of being remembered than those which appear non-meaningful and nonsensical to the learner. The phobia for mathematics by most students for example, most probably results from the inability of teachers of the subject to start their teaching from simple to complex concepts make their lessons more meaningful.

Next, materials that are interesting and pleasurable are better remembered than those that are not. This is because such materials remain at the conscious level of the mind. This is unlike uninteresting and painful experiences, which are often pushed to the subconscious mind to be forgotten. The impact created by a material also helps to arouse a learner to want to read, learn and remember what is learnt. On the other hand, if the material has no impact there will be less cortical arousal, improper catabolisation and anabolisation; thus retention will be difficult and this will lead to forgetfulness.

Furthermore, materials that are similar (symmetrical) are ceter remembered and more easily recalled than those that are

asymmetrical. Another reason has to do with the recency of the time the material is learnt. Recency enhances the quality of remembering and recall. Hence, materials that are recently perceived and learnt are better remembered than those that were learnt long ago.

Practice is yet another factor. Practice promotes perfection. The more an individual practices a given material, the better he will remember (2000) as one other factor. He argued that any material learnt at a temperature of 69°F and above would be less remembered than one learnt at a lower temperature. This is because high temperature disturbs the normal functioning of the brain and the human memory. It is therefore advisable that materials should be learnt when the temperature is relatively low.

Factors that Affect Better Learning

We now turn our attention to other factors that affect learning generally. They are as follows:

The generic make-up of an Individual

This seems to form the blueprint on which the future development and learning experience is built. This is because once there is a defect in the genetic make-up of an individual, there is already a limit to the level of attainment and learning such a person can achieve. Some of the defects include: "Down's syndrome", popularly known as monogolism and Klinfelter's syndrome, both of which lead to mental retardation.

Definitely, the mentally retarded or disadvantaged people are inhibited in learning as a result of their genetic make-up. On the other hand, the gifted are endowed with faster mental capabilities and can thus learn faster. Although I am not an environmentalist, yet, this one time, I support the belief that where genetic stops, the environment starts. This is because through training and environmental enrichment programmes, disadvantage people can still learn.

The Physiological Factors

The physiological and the genetic factors are linked because any defects in the physiological make-up of an individual from birth will have a negative effect on his/her learning. Thus the physiological state of our senses, glands, hormones, limbs and all parts of our body is very important in learning. For example, if the cerebral cortex, which is associated with thinking and intelligence, is not well developed, the rate of learning will suffer.

Nutritional and Health Factors

A hungry man, people say, is an angry man. The Yoruba adage is even more to the point; that Ebi kii wo inu, ki oro miran wo, that is literally "a belly taken over by hunger cannot accommodate any other thing". Thus, if a person is hungry he/she will not be ready to learn. The learner needs to feed well to ensure good health. Lack of good nutrition inhibits both the cognitive and physiological development of the learner. Poor nutritional intake could cause sickness, and this certainly prevents the individual from learning optimally.

Nigerian learners are faced with a lot of nutritional and health limitations which drastically affect I their learning negatively. For this reason, parents should limit the number of the children they desire to have, so as to be in a position to adequately provide for them.

The Ability of the Student

It is the genetic, cognitive physiological, nutritional and social factors, as we11 as acquisition of skills all taken together that decide ability. Ability could be low or high. An individual who has a high ability to cope and excel in a subject or task will invariably develop positive attitude towards learning, while the one with low ability will develop a negative attitude and not be able to learn well. However, people of low ability should be trained and motivated to improve their ability.

Parental Influence

In a study carried out by this lecturer in 1994, one of the more interesting findings is that parental influence affects the formation of attitude. Selection of subjects and even the performance of students. Student whose parents have interest in their schoolwork would be motivated to learn, study hard and perform well. However, in some cases, parental influence could produce a negative effect. For example, a parent may pressure on the child to offer a particular course subject without considering the child's ability and interest, this could result in poor performance on the part of the child.

Personality Factors

Personality factors include such features as cognitive style, self-concept, readiness and anxiety of the learner, each of which we now examine in turn.

Cognitive Style

Here we shall be considering for example, the impulsive as distinct from reflective students. Impulsive students are very eager to learn or answer questions. They will answer questions whether or not they know the right answers, often without properly reflecting on the questions. Reflective students, on the other hand, are not too eager to respond or act. They will examine the pros and cons of the question, before making a decision. In most cases, the response will be right. In the learning process, therefore, it is good for the learner to be reflective in order to learn better.

Self-concept

The self-concept of an individual plays an important role in his/her learning. It is through self-concept that the individual can believe that he/she too can study, learn and excel, or that he will not be able to cope. The individual will either develop confidence and strive towards learning the subject or totally

refuse or learn it. Students should develop positive self-concept (believing in themselves that they too can" make it").

Readiness

If a child is not mature enough, or not physiologically and psychologically ready to learn, he may not acquire much knowledge. - This is because he may be too young to cope with learning. This is one of the problems faced by students who enter any phase of academics a too tender age.

Anxiety

Anxiety is another personality fact, which affects learning. Anxiety is the physiological change due to fear and apprehension of failure. The highly anxious and the low anxious persons are often the most affected. This is because while the highly anxious individual often gets nervous, the low anxious gets complacent. It is those who are moderately anxious that often perform well.

In his doctoral work on Test. Anxiety, this lecturer (Yoloye, 1988), found that male students were more test anxious than their female counterparts because the former were eager to achieve and perform better than were the latter. In order to learn better therefore, students, whether male or female, should relax while studying or taking tests and examinations.

Reinforcement and Motivational Factors

When an individual lacks confidence, self-esteem, and self-respect and develops a feeling of inadequacy, he will be unable to face challenges. Learning tasks become difficult to handle. The spirit is dampened and, consequently, lack of interest in learning sets in. The result of a Rockefeller-funded project on: "Motivating Student to Learn Science' carried out by this presenter, Yoloye (1998), indicated that the use of guest lecturers, role models and career talks motivated the students to learn science. In the classroom setting, the teacher needs to reinforce positive response and motivate the students.

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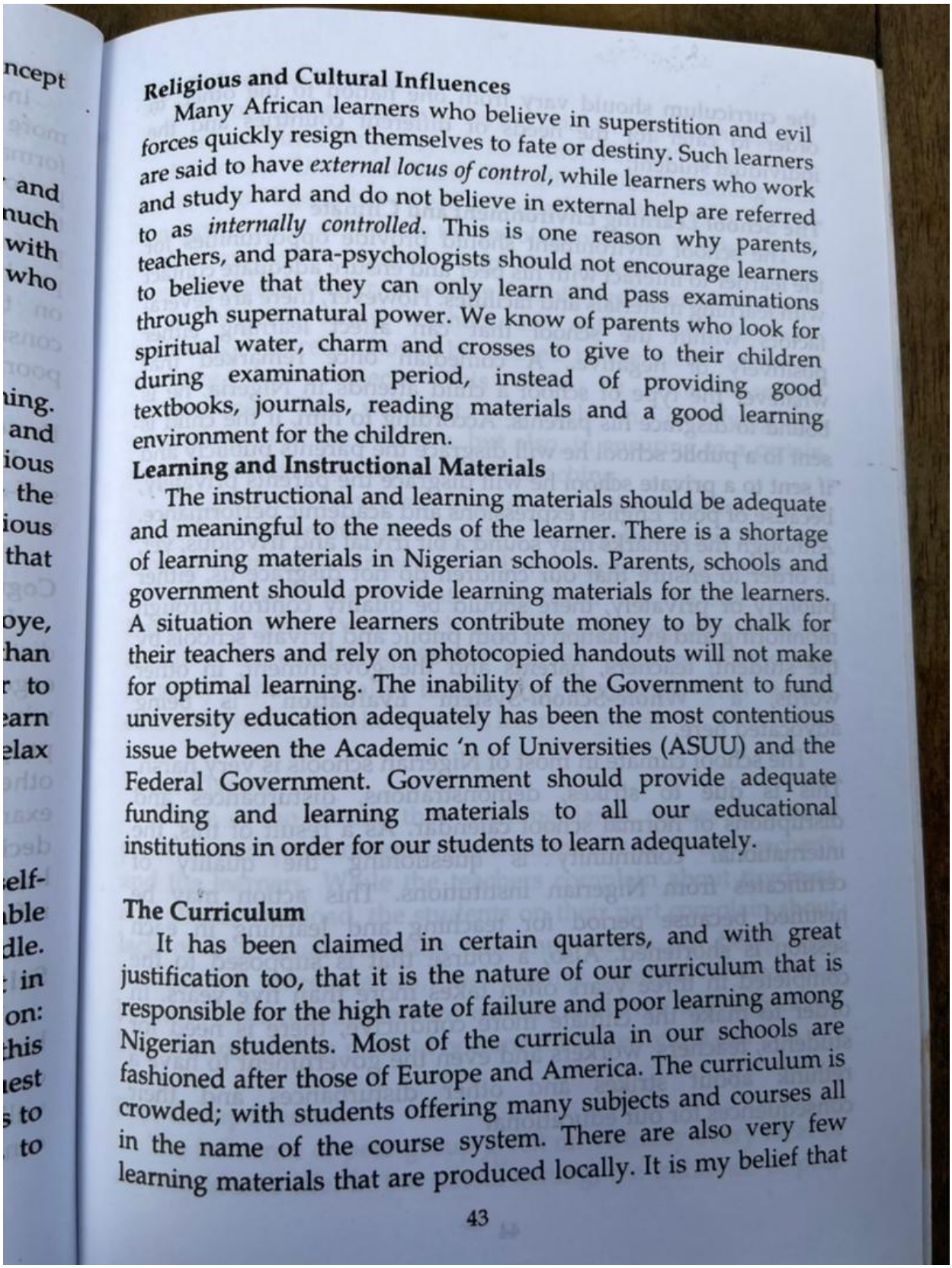

Religious and Cultural Influences

Many African learners who believe in superstition and evil forces quickly resign themselves to fate or destiny. Such learners are said to have *external locus of control*, while learners who work and study hard and do not believe in external help are referred to as *internally controlled*. This is one reason why parents, teachers, and para-psychologists should not encourage learners to believe that they can only learn and pass examinations through supernatural power. We know of parents who look for spiritual water, charm and crosses to give to their children during examination period, instead of providing good textbooks, journals, reading materials and a good learning environment for the children.

Learning and Instructional Materials

The instructional and learning materials should be adequate and meaningful to the needs of the learner. There is a shortage of learning materials in Nigerian schools. Parents, schools and government should provide learning materials for the learners. A situation where learners contribute money to by chalk for their teachers and rely on photocopied handouts will not make for optimal learning. The inability of the Government to fund university education adequately has been the most contentious issue between the Academic 'n of Universities (ASUU) and the Federal Government. Government should provide adequate funding and learning materials to all our educational institutions in order for our students to learn adequately.

The Curriculum

It has been claimed in certain quarters, and with great justification too, that it is the nature of our curriculum that is responsible for the high rate of failure and poor learning among Nigerian students. Most of the curricula in our schools are fashioned after those of Europe and America. The curriculum is crowded; with students offering many subjects and courses all in the name of the course system. There are also very few learning materials that are produced locally. It is my belief that

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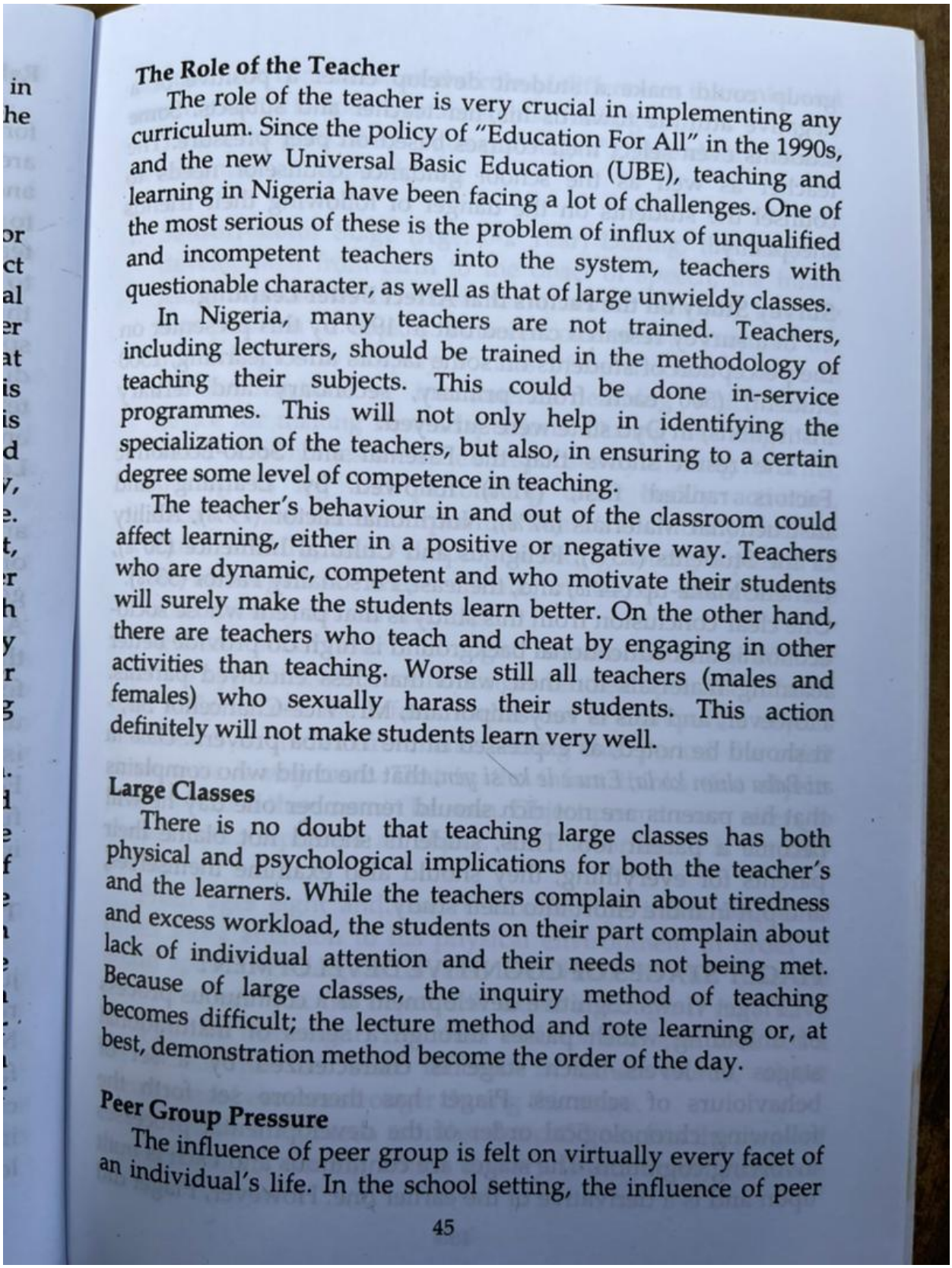
the curriculum should vary from one nation to the other, in order to cater for the needs of different countries and the individual student.

The School Learning Environment and Climate

The school environment should provide opportunities for the learner to interact with his peer and ensure adequate contact with learning materials and facilities. However, there are several factors within the school that can affect learning either positively or negative., A comedian once remarked that whatever the type of school a child attends in Nigeria, he is bound to disgrace his parents. According to him, if the child is sent to a public school he will disgrace the parents publicly and if sent to a private school he will disgrace the parents privately, because of poor English expressions and academic performance. Although the remarks may sound a bit trivial and frivolous, yet, in order to ensure that our children do not disgrace us, either publicly or privately, there should be quality control through monitoring and evaluation of both public and private schools by the student, teachers, parents and the government, in other words, a **"Whole-School-System Evaluation"** is being advocated here.

The school climate in most of Nigerian schools is very harsh. This is due to strikes, demonstrations, disturbances and disruptions of normal school calendar. As a result of this, the international community is questioning the quality of certificates from Nigerian institutions. This action may be justified because period for teaching and learning in each session is shortened. Also, a course that is supposed to the completed in three years often takes more than five years. In order to make the climate more conducive, there is need for students, teachers, workers and even the government to have a rethink about strikes and other disturbances and their consequences for our educational



The Role of the Teacher

The role of the teacher is very crucial in implementing any curriculum. Since the policy of "Education For All" in the 1990s, and the new Universal Basic Education (UBE), teaching and learning in Nigeria have been facing a lot of challenges. One of the most serious of these is the problem of influx of unqualified and incompetent teachers into the system, teachers with questionable character, as well as that of large unwieldy classes.

In Nigeria, many teachers are not trained. Teachers, including lecturers, should be trained in the methodology of teaching their subjects. This could be done in-service programmes. This will not only help in identifying the specialization of the teachers, but also, in ensuring to a certain degree some level of competence in teaching.

The teacher's behaviour in and out of the classroom could affect learning, either in a positive or negative way. Teachers who are dynamic, competent and who motivate their students will surely make the students learn better. On the other hand, there are teachers who teach and cheat by engaging in other activities than teaching. Worse still all teachers (males and females) who sexually harass their students. This action definitely will not make students learn very well.

Large Classes

There is no doubt that teaching large classes has both physical and psychological implications for both the teacher's and the learners. While the teachers complain about tiredness and excess workload, the students on their part complain about lack of individual attention and their needs not being met. Because of large classes, the inquiry method of teaching becomes difficult; the lecture method and rote learning or, at best, demonstration method become the order of the day.

Peer Group Pressure

The influence of peer group is felt on virtually every facet of an individual's life. In the school setting, the influence of peer

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group could make a student develop either a positive or a negative attitude towards his/her teacher and subjects. Some students even select their courses based on peer pressure. The teacher as well as the school guidance counselor needs to counsel the students on the danger of following their friends sheepishly.

Survey Study on the Factors that Affect Better Learning

In a survey research carried out in 1999 by this presenter on the perception of students on some factors affect learning, 1500 student, (500 each from primary, secondary and tertiary institutions) in Oyo state were surveyed.

The result shows that the Parental and Socio-Economic Factors ranked first, (91%) followed by Learning and Instructional Materials (87%), Nutritional Factor (79%), Ability of the Students (73%), Religious and Cultural Influence (50%), Genetic Make-up (44%) and, the least, Personality Factor (33%). One clear conclusion from this study is that parent whose socio-economic and educational background is high do provide better learning materials for their ward than less endowed parents. However, and this is very important, Mr. Vice-Chancellor Sir, - it should be noted, as expressed in the Yoruba proverb: *Omo to ni Baba ohun ko la, Enu e le ko si yen*, that the child who complains that his parents are not rich should remember one day he will become a parent too. Thus, students should not blame their parents for everything; they should also examine themselves, and put in more effort into their study.

PIAGET STAGES OF COGNITIVE DEVELOPMENT

Piaget views cognitive development as a continuous process of unfolding which passes through a series of maturational stages or levels. Each stage is characterized by a set of behavioiurs of schemes. Piaget has therefore set forth the following chronological order of the developmental processes involving cognition. The stages are continuous and each is built upon and is a derivative of the earlier one. However, Piaget did

not take into consideration the role of differences in mental and environmental factors to establish his1 findings.

Hence the prescribed "ages and stages" in the child's mental development are approximate.

1. **Sensori-motor Stage** (Age: 0-2 Year) During, this stage of development from birth to the onset of speech, the infant learns by means of its senses (natural reflexes) and by manipulation of objects. Between one to four months, the infant begins to display a class of behaviours known as circular reactions or instrumental learning which are a device for making new adaptations. During this stage, the infant consolidates the reflex responses by moving its arms, kicking its leg and performing other bodily activities. Activities are centered upon the infant's own body, such as thumb sucking, hand clasping or foot grabbing a period of self-investigation. These circular reactions observed are called *primary circular reactions*.

Between about four and eight months *secondary circular reactions* appear. Events are no longer centred upon the infant's own body instead the infant reaches out to manipulate objects discovered in the environment. During this period the *object permanence is very weak*. That is, the infant thinks that objects cease to exit if they cannot be seen. Object permanence refers to the ability to represent an object, whether or not it is actually present.

From ages eight and twelve months, the infant begins to direct more attention to his physical environment in order to attain specific goals-goal directed behaviour. By this time the infant realizes that the object still exists although it may have disappeared from sight. The child will, for example, look for a toy which he has seen hidden. In other words, object permanence becomes stronger during this stage.

By twelve to eighteen months, the child reaches the stage of experimentation during which tertiary (third order) reactions

appear. The child is now preoccupied with experimenting with new behaviours.

Problem solving behaviour and mental combinations of signs, symbols of images are evident between eighteen to twenty four months. The child no longer depends on physical exploration and manipulation of the environment. His ability to think can lead him to sudden insightful solutions without necessarily using the kinds of trial-and-error exploration. Object permanence is fully developed at this stage.

2. **Pre-Operational Period** (Age 2-7 years) The child's intellectual development is called pre-operational because he has not acquired the logical operations characteristic of later stages of thought. This period is divided into two stages. The first part is called the *pre-conceptual stage* (2-4 years); the second part is the *intuitive stage* (4-7 years)

(a) **Pre-conceptual Stage (Age: 2-4 years)**

During this stage the child begins to represent his environment with symbol. He develops immature concepts which Piaget called pre-concepts. For example, a child pre-conceptual stage may have a general idea that birds have wings and that they can fly or that cars have wheels, doors, horns, and they usually move on the streets and yet not able to distinguish between the kinds of birds or kinds of cars. The child begins to develop language during this time, but is still unable to perform certain cognitive operations. He uses languages to symbolize, yet is still unable to group thoughts into a framework of concepts and values. Thus, the reasoning that is taking place here depends very much on language which is the great instrument because the product of concept is normally represented by a word.

(b) **Intuitive Stage (Age: 4-7 years)**

This period is called the intuitive stage because children's beliefs are general based on what they sense to be true rather

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than on what logic or rational thought would dictate. In other words, this is the stage in which children appear to make immediate judgments without conscious mental steps in their formulation. Children's views are primarily centred on themselves, thus their action is described as being egocentric. That is, children generally perceive the world only in terms of their own perspective. The idea of sameness and identity develops at the intuitive stage. A common example is the tendency of the child of this age to call men generally daddy.

The thinking of children during this period is also characterized by irreversibility in that they are not able to go back and rethink of a process or concept. The child who has learned to write 3-2 = 5 may not solve the problem 5 = 3 + 2. He cannot do this because thinking has not acquired reversibility. Because of this, they tend to say, for example, that liquid poured from one container into another of different size or has increased or decreased in volume. This failure conserve in children is related to their inability to think back and imagine how the liquid looked earlier and recall that nothing was done to the liquid to change its volume. This lack of conservation can be illustrate1 as follows:

Conservation of Liquid

The child would expect that the quantity of water in B is greater than that of A despite the fact that the child saw the liquid being poured from A to B.

Conservation of Length

Two sticks of equal length will be accepted as equal so long as they are parallel and in line as shown above. If we move one step forward of the other the child will not say that one is long — the child lacks conservation length.

During the intuitive stage children are not able to comprehend more than one aspect of a problem at a time. Piaget refers to this cognitive limitation as the failure to decenter

because such children tend to center only upon single aspects of problems.

4. **Concrete Operations (Age: 7-11 years)**

Ability to conserve marks the end of pre-operational period and the beginning of concrete operations. An operation is defined as the transformation of one state to another state by means of a logical transformation. The pre-operation's child is incapable of understanding that 7 = 5 +2. If he is shown a group of 7 counters, he will say that the two small groups have counters in them than the large group. The notion liquids and solids can be transformed in shape without changing their volume or mass in manifested child reaches the stage of concrete operations. This is operation of conservation.

The beginning of concrete operation is characterized by the appearance of reversible thinking. They also apply decentering to comprehend more than one aspects of problem at a time. Children are now able to learn the operations of adding; subtracting multiplying and dividing operations that involve the logical thinking basic to classifying objects and events and understanding how they are related. This ability to arrange objects according to some quantified dimensions such as weight or size is called serialisation. Concept of reversibility is the concept that adjustment can be made until two quantities are equal by adding one or subtracting from the other. It is a kind of continuous operation in which the child either adds or subtracts. The operation is concrete because the child' either adds or subtracts. The operation is concrete because the child's action is based on the object that can be seen and he can internalize (represent external world by memories, image, language and symbols) the operation as he has acquired the language.

5. **Formal Operations (Age: 11-15 years)**

The concrete operational period gives way about the age of eleven to what Piaget regards as final period of intellectual development, the *formal operations*. This period coincides pretty

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with the ado. cent period and is characterized by attainment of intellectual skills of the adult.

The period of formal operations is characterized by the ability of the child for abstract thinking. It is also characterized by a tendency to deal first with what is hypothetically possible, using a complete combinatorial system, and then to proceed to test systematically the various possibilities. The child's thought processes become more competent, flexible and reversible. He can now solve complex problems, formulate hypotheses and make deductions as a scientist. He is not concerned with future and remote things. He is able to think numerically and make use of balance and proportion. The development of formal operations enables the adolescent to transfer understanding from one situation to another situation.

Implications of Piaget's Stages of Cognitive Development

Intellectual development can be stimulated in the following ways:

1. A teacher should be aware of the developmental stage at which each child is functioning and each should be taught only what the child is ready to learn at the present stage of development. The instructional method employed should take into consideration the ability and skills already acquired.

2. The curriculum should be planned with the level of cognitive operations and structures that children have successfully attained.

3. Teachers should act as guides, working with each child as he interacts with the environment, ensuring that experiences are appropriate for the developmental stage at which the child is functioning.

4. Willingness to appreciate alternative points of view and testing hypothesis develop in a social context through discussion, debate and argument with peers and adult.

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5. Activity method especially at the primary school level lays stress on the importance of children manipulating objects with widely differing properties of texture, colour and shape. This together with discovery, collection, classification, construction and analysis of materials are essential for the natural development of cognitive skills such as perceptions, conception, memory language, reasoning and creativity. These cognitive skills underly all academic learning. Absence of these skill predisposes the child to academic failure.
6. Teachers should take every Opportunity to point out similarities, equivalents, opposites, relationships and other group structures if they want their pupils to acquire the art of generalization and skill in handing concepts in increasing complexity.
7. Piaget stresses the educational significance of learning in a social context. Therefore, group discussion of a common problem, provided pupils have some experience or factual knowledge of the topic, is invaluable in development of formal reasoning and logical argument and should not be reserved for Senior School Certificate Class or the University.
8. Teachers must never adopt an authoritarian manner in discussion with children however bizarre or senseless the children's argument. That is, the teacher should not provoke outright hostility through direct confrontation with children, but he should listen patiently, suggest alternative approaches and points of view.
9. Teachers must master the logical models or structures of concrete and formal operations. This is important if we are to understand the relevant elements of content functions and quality of our pupil's though processes. The logical model of each stage helps us to determine the quality of our pupils' thinking and therefore, how best to help them in the process of learning

BRUNNER'S STAGE THEORY OF COGNITIVE DEVELOPMENT

Jerome Bruner, an American psychologist has made interesting contribution to our ideas on the course of intellectual development which links many of the ideas of Piaget, Bruner's work can almost be viewed as supplement to what Piaget had done. Brunner proposes a definite type of stage theory from Piaget describe cognitive development. Whereas Piaget emphasizes changes in cognitive structure as children move from stage to stage, Bruner emphasizes addition to cognitive structure which children acquire a they move from the enactive mode to iconic mode the symbolic mode.

Assumptions of Bruner's Theory

1. Growth is characterized by increasing independence of response from the immediate nature of the stimulus.
2. Growth depends upon internalizing events a 'storage system' that corresponds to the environment.
3. Intellectual growth involves in increasing capacity.

CHAPTER EIGHT
CURRENT CONCEPTIONS OF INTELLIGENCE AND ACADEMIC PERFORMANCE

Intelligence has been defined and studied under a number of different rubrics, among them individual differences, cognitive abilities, and aptitudes. Probably the most influential developments in our recent understanding of these concepts have come from educational and psychological researchers associated with cognitive psychology. Three of those individuals, Robert Sternberg, Howard Gardner, and John Horn serve as a representative sample of researchers who have made significant gains in our current conceptions of intelligence in the following paragraphs I briefly summarize each one's conceptualization of intellectual abilities.

Robert Stemberg's (1985) theory of intelligence contains three sub-theories, one about context one about experience, and one about the cognitive components of information processing. The contextual sub theory attempts to specify what would be considered "intelligent" in a given culture or context. According to Stemberg, culturally intelligent behaviour involves either adapting to one's present environment, selecting a more optimal environment, or reshaping one's current environment. The experiential subtheory claims that the expression of any intelligent behaviour will be a function of the amount of experience one has with the particular class of tasks being tested. According to Stemberg, intelligence is best demonstrated when the task is relatively novel or unfamiliar. The componential subtheory describes the cognitive structure and processes that together produce intelligent behaviour. Stemberg proposes three general types of processes: metacomponents (which control and monitor processing). Performance components (processes that execute plans), and knowledge acquisition components (which encode and assemble new knowledge). As a whole, the triarchic theory claims different aspects of kinds of intelligence (e.g., academic practical).

Howard Gardner one of the most popular recent views of intelligence, at least among practitioners, has come from Gardner (Garndner & Hatch, 1989). He proposes a theory of multiple intelligences of which he claims there are seven relatively independent intelligences. Those intelligences are logical-mathematical, linguistic, musical, spatial, bodily-kinesthetic, interpersonal and intrapersonal. Additionally, Gardner recognizes that one's experiences will influences the degree which each of the intelligences can be expressed. Thus, rather than characterizing an individual's intelligence by a single test score. Gardner argues for determining the profile of one's intelligences, taking into account culturally valued activities that can be expressed in a familiar context. Accordingly, this view suggests the need for new forms of assessment. Gardner and his colleagues have been working on versions of new, more authentic assessment tools for the past 8 years. The results have been mixed for a critique, the interested reader should see Stemberg (1991).

John Horn, along with his advisor, Raymond B. Cattell, John Horn has developed a theory of intelligence that specifies two broad factors, fluid abilities and crystallized abilities, along with numerous specific factors that support general ones. Fluid intelligence represents one's ability to reason and solve problems in novel or unfamiliar situations. Crystallized intelligence, on the other hand, indicates the extent to which an individual has attained the knowledge of a culture. According to Horn (1989), the Gf-Gc theory can also be thought of as a theory of multiple intelligences because of the Independence of fluid and crystallized abilities (characterized by distinctly separate patterns of covariation). Horn also argues that the expressions of these abilities" are outcropping of distinct influences operating through development, brain function, genetic determination and the adjustment, adaptations, and achievements of school work" (Horn, 1989, p. 79).

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LEARNING AND INTELLECTUAL ABILITIES

An important development in our understanding of intelligence, is the near universal agreement among researchers that at least some aspects of our intellectual abilities depend heavily on our experiential histories.

This acknowledgement should be clear in the three theories summarized above. Each one recognizes inseparability of experience from intellectual ability. This position stands in stark contrast to the one that holds that intelligence tests measure – or ought to measure - one's innate capacity. Admitting that experience influences one's performance on an intelligence test severely undermines the innate capacity notion, unless one the weaker position that intelligence is a measure of one's innate capacity to learn. In either case, the logical position to assume is that any theory that attempts to explain individual differences in intellectual abilities must include a learning sub-theory as part of it.

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CHAPTER NINE
MOTIVATION: THEORIES, NATURE AND DYNAMICS IN NIGERIAN CONTEXT

MOTIVATION

Emotion and motivation as mentioned earlier have common derivation, the word "emovere" which means to stir up, agiate, and excite. One of the most of more fascinating fields of psychology is the study and description of the internal conditions which influence people to behave as they do. Knowledge of human motivation is basic to our understanding of ourselves, and others. This is our concern in this lecture.

Examples:

-a man goes to the fridge and gets a bottle of beer – why?

-a student suddenly stands up in the library, goes to the vendor to buy phensic - why?

-a group of students crowd round the window in Oduduwa hall. There is a recent Bruce Lee film. They talk and laugh louder, move up and down, shake hands and are generally seen to be in constant motion - Why?

DEFINITION

Motivation is the hypothetical internal process that energy for behaviour and directs toward a specific goal. Motives are internal conditions, which direct our responses to Internal stimuli.

THEORIES OF MOTIVATION

The common-sense explanation of motivation as described in any standard dictionary conceives behaviour as directed towards sources of satisfaction and away from sources of dissatisfaction, and as instigated by conscious desires or wants. For example a common-sense explanation of why a man goes to the refrigerator and gets a bottle of beer might be the following: "he wants a drink. He knows that beer is in fridge; so he decides to get a beer, because beer is pleasurable when one is thirsty.

PSYCHOANALYTIC THEORY

The psychoanalytic theory also attributed behaviour to powerful innate forces. According to Freud our actions are determined by inner forces and impulses, often operating below the level of consciousness or awareness. Unconscious material cannot be detected directly but inferred from apparently irrational behaviour, dreams and symptoms of mental illness.

There are two opposing groups of instinct or 'impulses' according to Freud.

1. **The life instincts**: enhance life and growth. The energy of life instincts is libodo, which involves mainly sex and related activities.
2. **The death instincts**: push towards destruction. The death instinct can be directed inward in the form of suicide or other self-destruction behaviour of outward in the form of aggression toward others.

DERIVE-REDUCTION THEORY

The instinct was replaced by the concepts of drives: a **drive** is an aroused state that results from some biological need, such as need for food, water, oxygen or avoidance of painful stimuli. This aroused condition motivates the organism to remedy the need. For example, lack of food produces certain chemical changes in the blood, indicating a need for which in turn create a drive state of arousal or tension. The organism seeks to reduce the drive by doing something (e.g. finding food) to satisfy the need.

Need - refers to the physiological state of deprivation
Drive - refers to the psychological consequences is weakened.

They are parallel, but not identical. Need may be stronger, drive may not. A starved organism may get so weakened that drive is weakened.

The concept of drive has been tied to such variables as length of deprivation rate of learning, speed and efficiency of

performing learned acts, and general activity level. Homeostasis principle is basic to the drive concept i.e. the body's tendency to maintain a constant internal environment. Psychologists have broadened the principle of homeostasis to mean that any psychological or psychological imbalance will motivate behaviour designed to restore equilibrium.

AROUSAL THEORY OF MOTIVATION

By combining homeostasis with drive for stimulation, we get a useful model of human behaviour known as the arousal theory. It states that ideals levels of arousal exists for various activities. People try to keep arousal near these levels.

Arousal refers to the activation of the body and the nervous system. Arousal is zero at death; it is low during sleep; it is moderate during normal daily activities. It is high at times of excitement, emotion of panic. According to the arousal theory we become uncomfortable, when it is too low "bored" and when it is high, "fearful". "anxious" or "panic".

SOCIAL THEORY LEARNING OF MOTIVATION

Social learning theory focuses on patterns of behaviour the Individual learns in coping with the environment. Emphasis is on the reciprocal interaction between behaviour and environment. Internal forces do not drive us, we are not passive reactors to external stimulation.

The type of behaviour we exhibit partly determines the reward or punishment we receive, and this In turn influences behaviour some response may be successfu1, others may produce unfavourable results. We gradually learn to select the successful behaviour pattern.

Because we think and respect situations symbolically, we are able to foresee the probable consequences of our actions and alter our behaviour accordingly. To a large extent our actions are motivated by anticipated consequences. "I go to a party because I expect to meet my friends there etc".

Social learning therefore, emphasizes the self-regulatory processes in behaviour. A specific behaviour produces an expected outcome, but it also produces a self-evaluative reaction. People set their own standard of conduct or performance. They respond to their behaviour in self-satisfied or self-critical ways, depending on how the behaviour relates to their standards.

External reinforcement is most effective when it is consistent with self reinforcement, when society approves actions that the individual values high. In Nigeria of today people are often tempted to cheat on their Income tax return. The chances of getting caught (external punishment) are slim and the financial gain is substantial. However, the anticipation of personal feelings of self-contempt prevents some individuals from doing so: that is self-standards.

HIERARCHY OF MOTIVATIONS

Abraham Maslow proposed an interesting way of classifying human motives. According to him, there is hierarchy of motives ascending from the basic biological needs present at birth to more complex psychological motives like belongingness and love needs, aesthetic needs and need for self-actualization. The complex motives become important only after the more needs have been satisfied.

The needs at one level must be partially satisfied before those at the next level become important determiners of action. When food and safety needs are difficult to ensure, the satisfaction of those needs will dominate a person's actions and the higher motives will have little significance. Artistic and scientific endeavours do not flourish in societies where people struggle for food, shelter and safety.

Maslow contends that only when certain basic needs are satisfied do people have a real chance to approach "further reaches of human nature". This means that biological essence does not guarantee self-actualization. It rather depends on the interactions within complex people/environment systems.

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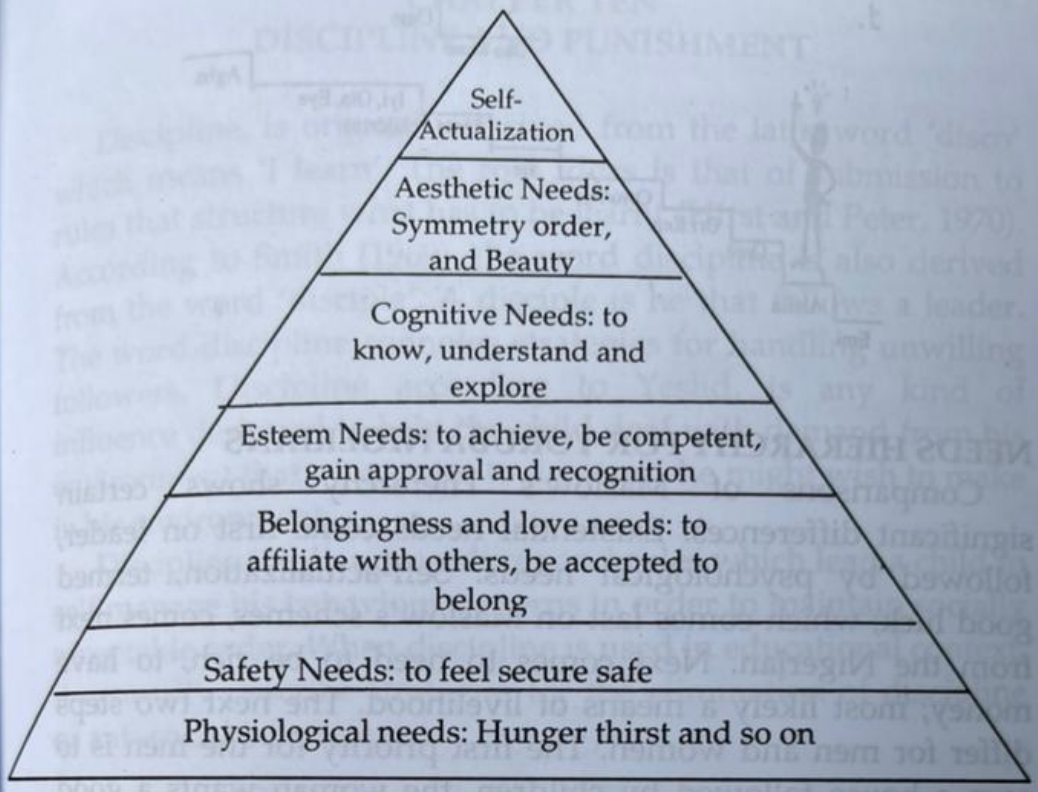
Self-Actualization
Aesthetic Needs: Symmetry order, and Beauty
Cognitive Needs: to know, understand and explore
Esteem Needs: to achieve, be competent, gain approval and recognition
Belongingness and love needs: to affiliate with others, be accepted to belong
Safety Needs: to feel secure safe
Physiological needs: Hunger thirst and so on

HIERARCHY OF NEEDS BY ABRAHAM MASLOW

Maslow's scheme provides an interesting way of looking at relationships among motives and the opportunities afforded by the environment. The important of Maslow's contribution is the emphasis on studying human possibilities for psychological health, joyous and enlightening experiences, and the emergent nature of motivation.

THE NIGERIAN HIERARCHY OF MOTIVATION

Attempts to apply the MasloW Scheme in the practical management of persons with mental health problems in this country suggests that the theory is limited. Markinyo collected data from patients with psychological problems, as well as linguistic philosophical analysis of certain common Yoruba utterances and oral traditions. Based on these, a leader like sequence of needs was proposed.

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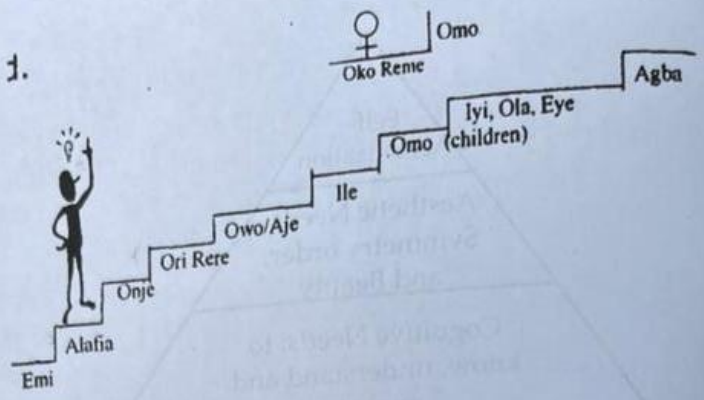

NEEDS HIERARCHY FOR YORUBA NIGERIANS

Comparisons of Maslow's Hierarchy shows certain significant differences. Existential needs come first on leader, followed by psychological needs. Self-actualization, termed good luck; which comes last on Maslow's schemes, comes next from the Nigerian. Next comes to need to be rich, to have money; most likely a means of livelihood. The next two steps differ for men and women. The first priority for the men is to own a house followed by children, the woman wants a good husband and children before a house. However, there is agreement on the subsequent steps of the hierarchy. To each old age also appears important to the study population.

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CHAPTER TEN
DISCIPLINE AND PUNISHMENT

Discipline, is originally derived from the latin word 'disco' which means 'I learn'. The root ideas is that of submission to rules that structure what has to be learnt (Hirst and Peter, 1970). According to Smith (1969), the word discipline is also derived from the word 'disciple'. A disciple is he that follows a leader. The word discipline connotes strategies for handling unwilling followers. Discipline according to Yeslid, is any kind of influence designed to help the child deaf with demand from his environment that go counter to demands he might wish to make in his environment.

Discipline implies procedures and rules which lead a child to self-manage his behaviour patterns in order to maintain socially acceptable order. When discipline is used in educational context, it generally describe strategies for the elimination of discipline or anti-social behaviour.

WHY TEACHERS FAIL IN DISCIPLINE THEIR PUPIL

The following are some of the reasons why teachers fail in disciplining the students:

1. Lack of understanding of children and the dynamics underlying their behaviour.
2. Unsuitable school curriculum in which every student can be fully engaged
3. Lack of good teacher relationship with the class and lack of sense of justice and fairness.
4. Lack of the understanding of the purpose of discipline. Many teachers judge discipline in terms of classroom orderliness rather than student growth. They insist on rigid rules.
5. Poor personality or incompetence on the part of the teachers.

WHAT IS PUNISHMENT?

Punishment is any presentation of unpleasant stimulus after the emission of behaviour to cause a reduced frequency of the emission of the behaviour. It may also mean the removal of positive event following the emission of behaviour to cause its reduced frequency. Punishment often implies infliction of some pains, suffering, loss or social disability as a direct consequence of some action on the part of the person punished.

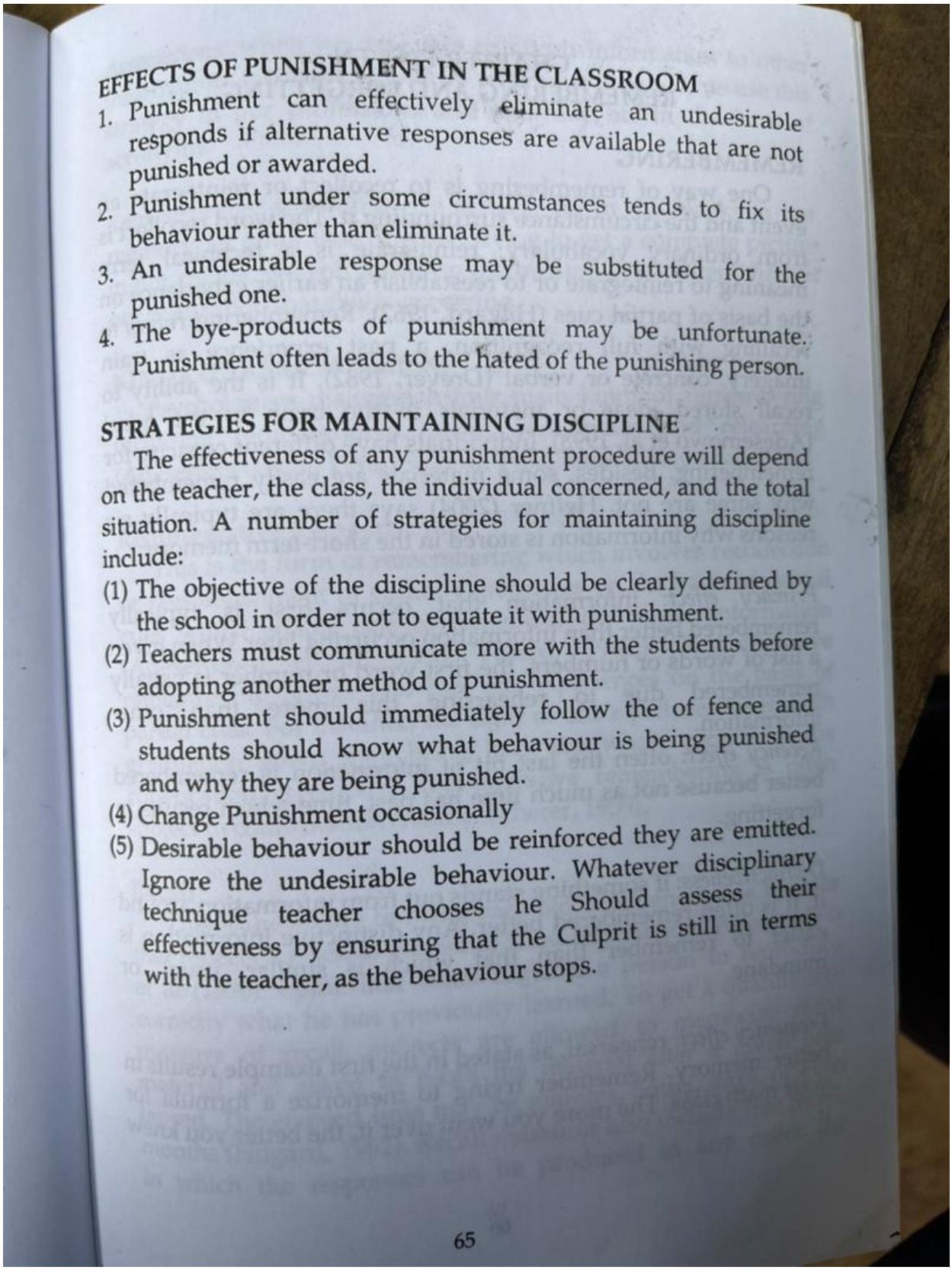
Punishment is often confused with discipline because it is a device to which teachers and parents often result in order to maintain discipline. This is because, punishment must involve the intentional inflicting of pain of some kind unpleasantness, this must be influenced by some authority; and it must be inflicted on an offender as a consequence of breach of rules.

PUNISHING DEVICES

Apart from the corporal form of punishment, a recent study of Akinboye (1980) on other methods or discipline types used in Nigerian school system as reported by secondary school teachers revealed other types of Punishing devices.

Rank of Discipline Strategy

1. Reprimands
2. Warnings and coercions
3. Detention to do manual labour
4. Expulsion from school
5. Corporal punishment
6. Sending out students during lesson
7. Use of difficult school examinations
8. Withdrawal of classroom privileges
9. Moral training
10. Imposition writing
11. Ignoring of undesirable behaviour
12. Self management



EFFECTS OF PUNISHMENT IN THE CLASSROOM

1. Punishment can effectively eliminate an undesirable responds if alternative responses are available that are not punished or awarded.
2. Punishment under some circumstances tends to fix its behaviour rather than eliminate it.
3. An undesirable response may be substituted for the punished one.
4. The bye-products of punishment may be unfortunate. Punishment often leads to the hated of the punishing person.

STRATEGIES FOR MAINTAINING DISCIPLINE

The effectiveness of any punishment procedure will depend on the teacher, the class, the individual concerned, and the total situation. A number of strategies for maintaining discipline include:

(1) The objective of the discipline should be clearly defined by the school in order not to equate it with punishment.

(2) Teachers must communicate more with the students before adopting another method of punishment.

(3) Punishment should immediately follow the of fence and students should know what behaviour is being punished and why they are being punished.

(4) Change Punishment occasionally

(5) Desirable behaviour should be reinforced they are emitted. Ignore the undesirable behaviour. Whatever disciplinary technique teacher chooses he Should assess their effectiveness by ensuring that the Culprit is still in terms with the teacher, as the behaviour stops.

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CHAPTER ELEVEN
REMEMBERING AND FORGETTING

REMEMBERING

One way of remembering is to recollect or reintegrate an event and the circumstance surrounding it. The word recollect is from ordinary vocabulary; reintegrate is a technical term meaning to reintegrate or to reestablish an earlier experience on the basis of partial cues (Hilgard, 1962). Remembering refers to recalling with full recognition, a past experience as train imagery, concrete or verbal (Drever, 1982). It is the ability to recall stored ideas or materials in the brain to the mind (Adesemowo et al, 1998). Individuals have different capacity for remembering. Besides, some materials are easily remembered why some are not. Heffner (2004) says there are typically six reasons why information is stored in the short-term memory:

Primacy effect: information that occurs first is typically remembered better than information occurring later When given a list of words or numbers, the first word or number is usually remembered due to rehearsing this more than other information.

Recency effect: often the last bit of information is remembered better because not as much time has past, time which results in forgetting.

Distinctiveness: if something stands out from information around it, it is often remembered better. Any distinctive information is easier to remember than that which is similar, usual, or mundane.

Frequency effect: rehearsal, as stated in the first example results in better memory. Remember trying to memorize a formula for your math class. The more you went over it, the better you knew it.

Associations: when we associate or attach information to other information, it becomes easier to remember. Many of us use this strategy in our professions and everyday life in the form of acronyms.

Reconstruction: sometimes we actually fill in the blanks in our memory. In other words, when trying to get a complete picture in our minds, we will make up the missing parts, often without our realization that this is occurring.

KINDS OF REMEMBERING

Psychologists distinguish four main kinds of remembering including redintegrative, recall, recognition and relearning (Adesemowo et al, 1998; Hilgard, 1962; Rosenzweig et al, 2002).

Redintegrative Remembering

This is the form of remembering which involves recollection or reestablishment of earlier experiences on the basis of partial cues which enable one to remember the whole information (Adesemowo et al, 1998; Hilard, 1962;). Redintegrative remembering brings into fore old experiences on the basis of partial cues. For instance, the sight of one's pictures taken with graduation gown may bring back the whole picture of the convocation ceremony; Redintegrative remembering is often subject to confirmation (Reiff & Scherer, 1959).

Recall

This is the ability to bring back old experiences in a manner that reflects the actual picture of those experiences. Adesemowo et al (1998), opine that recall requires a person to reproduce correctly what he has previously learned. To get a quantitative measure of recall, subjects are allowed to memorize some material and asked to recall the material after a given time lapsed. The elapsed time may be minutes, hours, days, or even months (Hilgard, 1962). Recall measures also include free recall, in which the responses can be produced in any order the

subjects to recall materials in the order they were presented (Adesemowo et al, 1998).

Recognition

Recognition is to recognize something, to acknowledge that it is familiar. It is a common experience, but it is a complex and somewhat mysterious process (Hilgr, 1962). it is discrimination between seen and unseen, known and unknown. Recognition measures could involve presentation of only one item to which the subject responds 'Yes or No'. It can also involve exposure to several items from which the subject is asked to pick the correct item (Adesemowo et al, 1998). Lane (2000) suggests that correct faulty recognition could be distinguished. The subjects could be given a mixture of items previously presented and similar ones never presented to them in the same proposition. Subjects are asked to separate known from unknown. Recognition score is calculated using the corrected guessing formula for true-false examination:

Recognition = (Right-Wrong) X 100

Relearning

This is to learn again what has been previously learnt. It is situations where materials previously learnt can be re-learnt very easily and quickly. Adesemowo et al, (1998), say it is the rate of acquiring some information all over again given that it has earlier been learnt and forgotten. Even though something may seem to be completely forgotten, it maybe easier to learn it the second time because it was learned in the past (Hilgard, 1962). It is easier for individuals to relearn materials that were previously learnt and forgotten (Rosenzweig et al, 2002). Relearning is measured by determining the difference between trials in the first and second learning. The difference is expressed in percentage by using the formula:

Saving Score = Original trials — Relearning trials X 100

FORGETTING

SUCCESS

I WISH EVERYONE SUCCESS IN THE FORTHCOMING E-TEST AND EXAMINATION. WE'LL NEVER HAVE CAUSE TO REGRET (AMEN).

FOR LEGITIMATE INFORMATION AND UPDATES ABOUT TASUED, KINDLY GET IN TOUCH WITH ME VIA CALL OR WHATSAPP.

07011820028

TELLA NELSON FEMI

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